

**Citrix**  
**MULTIUSER**™

**QUICK  
REFERENCE  
GUIDE**

**CITRIX**





# **Citrix *MULTIUSER***

# **QUICK REFERENCE GUIDE**

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## INTRODUCTION

This quick reference provides the user with a summary of the most often used keys, commands, and utilities available with the Citrix *MULTIUSER* system. Because Citrix *MULTIUSER* provides multiuser extensions to MS OS/2, it will be referred to in this publication as MS OS/2 *MULTIUSER*.

It does not contain the commands and utilities that are intended primarily for system administration or operation.

Refer to the Citrix *MULTIUSER* manuals (User's Guide, System Administrator's Guide, Command Reference) for additional detail including the security and resource management restrictions on command and utility usage. These command and utility descriptions only refer to the functions available to someone in the User security class. See the Command Reference for functions available to Administrator class users.

# DEFAULT HOT KEY SUMMARY

## Quick Reference Guide

Command Name	Description/Syntax
SESSION SWITCH	Switches to the next session (program) running under the current login.  <b>ALT+ESC</b>
SESSION DIRECT	Switches the Program Selector to the foreground.  <b>CTRL+ESC</b>
SESSION CREATE	Creates a new session running the program specified by the COMSPEC environment variable, which defaults to command interpreter.  <b>ALT+TAB</b>
LOGIN SWITCH	Switches to the next login at the current terminal.  <b>CTRL+TAB</b>
STOP PROGRAM	Stops the program you have running.  <b>CTRL+C or CTRL+BREAK</b>
PRINT SCREEN	Sends the screen image of the current foreground session to the printer.  <b>PRINT SCREEN</b>
PRINT SCREEN TOGGLE	Echoes future output to the printer until this hotkey is pressed again.  <b>CTRL+PRINT SCREEN</b>
RESTART TERMINAL	Terminates all applications running on the terminal, then restarts the terminal.  <b>CTRL+ALT+DEL</b>

Note: The System Administrator can change the hot key assignments.

Command Name	Description/Syntax
ANSI	<p>Changes or displays the support for ANSI escape sequences in an MS OS/2 <i>MULTIUSER</i> session.</p> <p>ANSI [ON   OFF]</p>
CLS	<p>Clears the screen, leaving only the prompt and the cursor.</p> <p>CLS</p>
CMD	<p>Starts a new MS OS/2 <i>MULTIUSER</i> command interpreter.</p> <p>CMD [<i>drive:</i>][<i>path</i>] [/S] [/C <i>command(s)</i>]   /K <i>command(s)</i></p>
DATE	<p>Displays the current date.</p> <p>DATE [<i>month-day-year</i>]</p>
DPATH	<p>Specifies which directories besides the current directory an application should search in order to find data files (files with extensions other than .EXE, .COM, .BAT, or .CMD).</p> <p>DPATH [;   [<i>drive:</i>]<i>path</i>[;...]]</p>
EXIT	<p>Ends the current command interpreter and returns control to the program from which it was started.</p> <p>EXIT</p>
HELP	<p>Displays help information about MS OS/2 <i>MULTIUSER</i> and about error or warning messages displayed in a session.</p> <p>HELP [ON   OFF   <i>messageID</i>]</p>
KEYS	<p>Turns ON or OFF the special functions of the <b>DIRECTION</b> keys and editing keys that enable you to edit commands on the command line. You can retrieve any command that is in the command-line buffer, edit it, and use it at the command prompt.</p> <p>KEYS [ON   OFF   LIST]</p>

# CONTROLLING SESSION OPERATIONS

## Quick Reference Guide

Command Name	Description/Syntax
MODE (Display)	<p>Changes the way text is displayed on the screen.</p> <p>MODE <i>display[,rows]</i></p>
PATH	<p>Specifies where MS OS/2 <i>MULTIUSER</i> is to search for a command file or application if the program is not in the current directory.</p> <p>PATH [ ;   [<i>drive:</i>] <i>path</i>[;...]]</p>
PROMPT	<p>Changes the command prompt for the current MS OS/2 <i>MULTIUSER</i> command interpreter. This change affects only the current session.</p> <p>PROMPT [<i>string</i>]</p>
SET	<p>Defines an environment variable by naming the variable and giving a value for it.</p> <p>SET [<i>string1=[string2]</i>]</p>
SPOOL	<p>Controls the operations of the spooler. It can:</p> <ul style="list-style-type: none"><li>■ Change status of jobs.</li><li>■ Query status of queues and jobs.</li></ul> <p>SPOOL [<i>username[.groupname]</i>] [/Q] [/CQ:<i>queuename</i>] [/QD:<i>queuename</i>] [/CJ:<i>jobID</i>] [/PA:<i>jobID</i>] [/RJ:<i>jobID</i>] [/HJ:<i>jobID</i>]</p>
TIME	<p>Displays the current time.</p> <p>TIME [<i>hours:minutes</i>] [:<i>seconds[.hundredths</i>]]</p>
VER	<p>Displays the MS OS/2 <i>MULTIUSER</i> version number.</p> <p>VER</p>

Command Name	Description/Syntax
ATTRIB	<p>Changes or displays the flags of the file you specify. The flags determine whether the file is read-only and whether it is affected when you use the BACKUP, RESTORE, and XCOPY utilities.</p> <p><code>ATTRIB [+R   -R] [+A   -A] [drive:][path]filename [/S]</code></p>
COMP	<p>Compares two files or sets of files to see whether they are the same.</p> <p><code>COMP [drive:][path][filename1] [drive:][path][filename2]</code></p>
COPY	<p>Copies information from a <i>source</i> to a <i>destination</i>. The <i>source</i> is usually a file or files, but it can also be a drive or directory or the output of a device (such as the keyboard); the <i>destination</i> can be one or more files or a device.</p> <p><code>COPY source [/A   /B] [+source [/A   /B] [...]] destination [/A   /B] [/V] [/F]</code></p>
DEL	<p>Deletes one or more files. See also ERASE.</p> <p><code>DEL [drive:][path]filename [...] [/P]</code></p>
EAUTIL	<p>Deletes or copies (splits) the extended attributes from a data file or directory and stores them in a separate file, or copies (joins) the extended attributes back to the original data file or directory.</p> <p><code>EAUTIL [/S [/R] [/P]   /J [/O   /M] [/P]] filename [boldfile]</code></p>
ERASE	<p>Deletes one or more files. See also DEL.</p>
MOVE	<p>Moves a file or directory from one directory to another on the same drive.</p> <p><code>MOVE [drive:][path1]source [path2][destination]</code></p>

# MANAGING YOUR FILES

## Quick Reference Guide

Command Name	Description/Syntax
PRINT	<p>Sends a file to be printed to a device.</p> <p>PRINT [/D:<i>device</i>] [/B] [<i>drive:</i>][<i>path</i>] <i>filename</i> [...] or PRINT [/D:<i>device</i>] [/T   /C]</p>
RENAME	<p>Changes the name of a file or directory. You can abbreviate RENAME as REN.</p> <p>RENAME [<i>drive:</i>][<i>path</i>] <i>filename1 filename2</i></p>
REPLACE	<p>Selectively replaces files in the destination directory with new versions of those files from the source directory, or adds new files to the destination directory.</p> <p>REPLACE [<i>drive:</i>][<i>path</i>] <i>filename</i> [[<i>drive:</i>]<i>path</i>] [[/A   /S]   [/A   /U]] [/P] [/R] [/W] [/F]</p>
TYPE	<p>Displays the contents of one or more text files, in the order specified, without modifying them.</p> <p>TYPE [<i>drive:</i>][<i>path</i>] <i>filename</i> [...]</p>
UNPACK	<p>Decompresses and copies a compressed file.</p> <p>UNPACK [<i>drive:</i>][<i>path</i>] <i>filename</i> [<i>drive2:</i>][<i>path2</i>] [/V]</p>
XCOPY	<p>Copies files and directories, including any subdirectories, from one disk to another.</p> <p>XCOPY [<i>drive1:</i>][<i>path1</i>] [<i>filename1</i>] [<i>drive2:</i>][<i>path2</i>] [<i>filename2</i>] [/S] [/E] [/P] [/V] [/A] [/M] [/F] [/D:<i>date</i>]</p>

<b>Command Name</b>	<b>Description/Syntax</b>
CHDIR	<p>Changes the current directory. You can abbreviate CHDIR as CD.</p> <p>CHDIR [<i>drive:</i>] [<i>path</i>]</p>
DIR	<p>Displays a list of the files on a disk or in a directory, with information about the size of each file and when it was created, the number of files in the directory, and the number of bytes free on the disk.</p> <p>DIR [<i>drive:</i>] [<i>path</i>] [<i>filename</i>] [...] [/P] [/W   /F] [/N]</p>
MKDIR	<p>Creates a directory. You can abbreviate MKDIR as MD.</p> <p>MKDIR [<i>drive:</i>] [<i>path</i>] <i>directoryname</i> [ [<i>drive:</i>] [<i>path</i>] <i>directoryname</i> [...] ]</p>
RMDIR	<p>Deletes a directory. You can abbreviate RMDIR as RD.</p> <p>RMDIR [<i>drive:</i>] <i>path</i> [...]</p>
TREE	<p>Displays the path of each directory on a disk and lists all the subdirectories (and, as an option, all the files as well).</p> <p>TREE [<i>drive:</i>] [/F]</p>

# PREPARING AND MAINTAINING YOUR DISKS AND DISKETTES

## Quick Reference Guide

Command Name	Description/Syntax
DISKCOMP	<p>Compares two floppy disks track by track.</p> <p>DISKCOMP [<i>drive1:</i>] [<i>drive2:</i>]</p>
DISKCOPY	<p>Makes a duplicate of a floppy disk.</p> <p>DISKCOPY [<i>drive1:</i>] [<i>drive2:</i>]</p>
FORMAT	<p>Prepares a diskette so that it can store files. See the RESERVE utility for diskette access considerations.</p> <p>FORMAT <i>drive:</i> [/4] [/T:<i>tracks</i>] [/N:<i>sectors</i>] [/V:<i>label</i>] [/F:<i>size</i>]</p>
VERIFY	<p>Turns write verifications on or off.</p> <p>VERIFY [ON   OFF]</p>
VOL	<p>Displays the volume label and the volume serial number of the specified disk, if they exist.</p> <p>VOL [<i>drive:</i>] [...]</p>

Command Name	Description/Syntax
FIND	<p>Searches the file or files you specify or the input you give it for a specific string of text and displays all the instances of that string that it finds.</p> <p>FIND [/V] [/C] [/N] "string" [[<i>drive:</i>] [<i>path</i>] [<i>filename</i>] [...]]</p>
MORE	<p>Reads from standard input and displays what it reads, one screenful at a time.</p> <p>MORE&lt;<i>source</i></p>
SORT	<p>Sorts lines of input in alphabetical and numeric order and sends the output lines to the screen.</p> <p>SORT [/R] [/+N] &lt;<i>source</i></p>

## BATCH COMMANDS

### Quick Reference Guide

Command Name	Description/Syntax
CALL	Calls one batch program from another batch program.  CALL [ <i>drive:</i> ][ <i>path</i> ] <i>batchfile</i> [ <i>arg</i> ]
ECHO	Turns the echo feature on or off.  ECHO [ON   OFF   <i>message</i> ]
ENDLOCAL	Restores the drive, directory, and environment settings that were in effect before the SETLOCAL command was used.  ENDLOCAL
EXTPROC	Defines an external batch processor for a batch program.  EXTPROC [ <i>drive:</i> ][ <i>path</i> ] <i>filename</i> [ <i>options</i> ]
FOR	Performs a command for a set of items.  FOR [%] % <i>x</i> IN ( <i>item</i> [...]) DO <i>command</i>
GOTO	Causes processing to continue at the line after a specified label.  GOTO <i>label</i>
IF	Performs a command based on the result of a condition.  IF [ NOT ] <i>condition command</i>
PAUSE	Temporarily suspends processing of the batch program.  PAUSE [ <i>comment</i> ]
REM	Adds remarks to a batch program.  REM [ <i>comment</i> ]
SETLOCAL	Defines drive, directory, and environment variables that are used during batch program processing.  SETLOCAL
SHIFT	Changes the position of the replaceable parameters in batch-program processing.  SHIFT

Command Name	Description/Syntax
CHANGE PRNMODE	<p>CHANGE PRNMODE changes the line and character spacing of a parallel printer for the current loginname.</p> <p>CHANGE PRNMODE <i>portname</i> [/LPI:[6 8]] [/CPL:[80 132]] [/?]</p>
LOGOUT	<p>Terminates the current login.</p> <p>LOGOUT [<i>loginID</i>] [/V] [/?]</p> <p>LOGOUT [\iusername.groupname\iloginID] [/V] [/?]</p> <p>LOGOUT [\iterminalname] [/V] [/?]</p>
MSG	<p>Sends a message to a user.</p> <p>MSG [<i>username[.groupname]</i>] [/TIME:<i>seconds</i>] [/V] [/?] [<i>message</i>]</p> <p>MSG [\iusername.groupname\iloginID] [/TIME:<i>seconds</i>] [/V] [/?] [<i>message</i>]</p> <p>MSG [\iterminalname] [/TIME:<i>seconds</i>] [/V] [/?] [<i>message</i>]</p>
OWNER	<p>Displays and changes the owner designation on HPFS files and directories.</p> <p>OWNER <i>pathname</i> [<i>username[.groupname]</i>] [/C:<i>username[.groupname]</i>] [/S] [/DIR] [/FILE] [/?]</p>
PASSWORD	<p>Changes the PASSWORD for the current <i>loginname</i>.</p> <p>PASSWORD [/PASSWORD:<i>old/new/new</i>] [/Q] [/?]</p>
QUERY HOST	<p>Displays information about the current MS OS/2 <i>MULTIUSER</i> system.</p> <p>QUERY HOST [/LICENSE] [/V] [/?]</p>

## UTILITIES WITH MULTIUSER FUNCTIONS

### Quick Reference Guide

Command Name	Description/Syntax
QUERY LIMITS	<p>Displays the user resource limits and current totals for the current <i>loginname</i>. The minimum and maximum limit and current total for each resource will be displayed.</p> <p>QUERY LIMITS [/?]</p>
QUERY LOGIN	<p>Displays information about logins.</p> <p>QUERY LOGIN [<i>loginID</i>] [/V] [/?]</p> <p>QUERY LOGIN [\iusername.groupname\iloginID] [/V] [/?]</p> <p>QUERY LOGIN [\iterminalname] [/V] [/?]</p>
QUERY MEMORY	<p>Displays information about the allocation of user application memory in the system for the current <i>loginname</i>. This information includes both the amount of memory present in the system and the amount of memory that is currently swapped to disk.</p> <p>QUERY MEMORY [/DLL] [/RAW] [/?]</p> <p>QUERY MEMORY [\iusername[.\igroupname]\iloginID\isessionID\iprocessID] [/DLL] [/RAW] [/?]</p> <p>QUERY MEMORY [\iterminalname] [DLL] [RAW] [/?]</p> <p>QUERY MEMORY [/FREE] [/?]</p>
QUERY PRINT	<p>QUERY PRINT displays the current print queues in the system and the print jobs in each queue for a specific <i>loginname</i>, if there are any.</p> <p>QUERY PRINT [\iusername[.\igroupname]] [/?]</p>
QUERY PROCESS	<p>Displays information about processes of the current <i>loginname</i>.</p> <p>QUERY PROCESS [<i>processID</i>] [/V] [/?]</p> <p>QUERY PROCESS [\iusername.groupname\iloginID\isessionID\iprocessID] [/V] [/?]</p> <p>QUERY PROCESS [\iterminalname] [/V] [/?]</p>

Command Name	Description/Syntax
QUERY SESSION	<p>Displays information about sessions of the current <i>loginname</i>.</p> <p>QUERY SESSION [<i>sessionID</i>] [/V] [/?]</p> <p>QUERY SESSION [\iusername.\groupname\loginID\sessionID] [/V] [/?]</p> <p>QUERY SESSION [\iterminalname] [/V] [/?]</p>
QUERY TERMINAL	<p>Displays information about terminals.</p> <p>QUERY TERMINAL [<i>terminalname</i>] [/MODE] [/CONNECT] [/FLOW] [/V] [/?]</p>
QUERY USER	<p>Displays information about users who are logged into the system.</p> <p>QUERY USER [\iusername[.\groupname]] [/V] [/?]</p> <p>QUERY USER [\iterminalname] [/V] [/?]</p>

## DISKETTE DRIVE ACCESS—RESERVATION REQUIRED

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To prevent unintentional simultaneous access to a diskette drive by multiple users, it is necessary to reserve a drive before it can be accessed. For example:

**RESERVE A:**

Upon completion of use of the drive the reservation should be deleted.

**RESERVE A: /d**

A user must be authorized to access the diskette device or the reservation will not be granted.

## SYSTEM EDITOR

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A full screen system editor is available with MS OS/2 *MULTIUSER*. To start the system editor type:

E

from a command prompt.



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